

REFERENCES

- ACKERS, P., WHITE, W.R., PERKINS, J.A., and HARRISON, A.J.M. (1978). "Weirs and Flumes for Flow Measurement." *John Wiley*, Chichester, UK, 327 pages.
- AGOSTINI, R., BIZZARRI, A., MASETTI, M., and PAPETTI, A. (1987). "Flexible Gabion and Reno Mattress Structures in River and Stream Training Works. Section One : Weirs." *Officine Maccaferri*, Bologna, Italy, 2nd edition.
- ALEMBERT, Jean le Rond d' (1752). "Essai d'une Nouvelle Théorie de la Résistance des Fluides." ('Essay on a New Theory on the Resistance of Fluids.') *David*, Paris, France.
- ALEXANDER, J., and FIELDING, C. (1997). "Gravel Antidunes in the Tropical Burdekin River, Queensland, Australia." *Sedimentology*, Vol. 44, pp. 327-337.
- ANDERSON, A.G. (1942). "Distribution of Suspended Sediment in a Natural Stream." *Trans. Amer. Geophys. Union*, Vol. 23, Pt. 2, pp. 678-683.
- APELT, C.J. (1983). "Hydraulics of Minimum Energy Culverts and Bridge Waterways." *Australian Civil Engrg Trans.*, I.E.Aust., Vol. CE25, No. 2, pp. 89-95.
- APELT, C.J. (1994). "The Minimum Energy Loss Culvert." *Videocassette VHS colour*, Dept. of Civil Eng., University of Queensland, Australia, 18 minutes.
- BAGNOLD, R.A. (1956). "The Flow of Cohesionless Grains in Fluids." *Philos. Trans. Roy. Soc. London*, Series A, No. 964, Vol. 249, pp. 235-297.
- BAGNOLD, R.A. (1966). "An Approach to the Sediment Transport Problem from General Physics." *U.S. Geological Survey*, Professional Paper 422-I, Washington D.C., USA, 37 pages.
- BAKHMETEFF, B.A., and FEDOROFF, N.V. (1943). "Energy Loss at the Base of a Free Overfall - Discussion." *Transactions*, ASCE, Vol. 108, pp. 1364-1373.
- BAKHMETEFF, B.A., and MATZKE, A.E. (1936). "The Hydraulic Jump in Terms of Dynamic Similarity." *Transactions*, ASCE, Vol. 101, pp. 630-647. Discussion : Vol. 101, pp. 648-680.
- LeBARON BOWEN Jr, R. and ALBRIGHT, F.P. (1958). "Archaeological Discoveries in South Arabia." *The John Hopkins Press*, Baltimore, USA.
- BAUER, W.J. (1954). "Turbulent Boundary Layer on Steep Slopes." *Transactions*, ASCE, Vol. 119, pp. 1212-1233.
- BAZIN, H. (1865a). "Recherches Expérimentales sur l'Ecoulement de l'Eau dans les Canaux Découverts." ('Experimental Research on Water Flow in Open Channels.') *Mémoires présentés par divers savants à l'Académie des Sciences*, Paris, France, Vol. 19, pp. 1-494 (in French).
- BAZIN, H. (1865b). "Recherches Expérimentales sur la Propagation des Ondes." ('Experimental Research on Wave Propagation.') *Mémoires présentés par divers savants à l'Académie des Sciences*, Paris, France, Vol. 19, pp. 495-452 (in French).
- BAZIN, H. (1888-1898). "Expériences Nouvelles sur l'Ecoulement par Déversoir." ('Recent Experiments on the Flow of Water over Weirs.') *Mémoires et Documents, Annales des Ponts et Chaussées*, Paris, France,

CHANSON, H. (2002) "Hidraulica Del Flujo en Canales Abiertos", McGraw Hill Interamericana, División Universidad, Columbia (ISBN 10: 958-410-256-7) (EAN: 9789584102560).

- 1888 : Sér. 6, Vol. 16, 2nd Sem., pp. 393-448; 1890 : Sér. 6, Vol. 19, 1st Sem., pp. 9-82; 1891 : Sér. 7, Vol. 2, 2nd Sem., pp. 445-520; 1894 : Sér. 7, Vol. 7, 1st Sem., pp. 249-357; 1896 : Sér. 7, Vol. 12, 2nd Sem., pp. 645-731; 1898 : Sér. 7, Vol. 15, 2nd Sem., pp. 151-264 (in French).
- BELANGER, J.B. (1828). "Essai sur la Solution Numérique de quelques Problèmes Relatifs au Mouvement Permanent des Eaux Courantes." ('Essay on the Numerical Solution of Some Problems relative to Steady Flow of Water.') *Carilian-Goeury*, Paris, France (in French).
- BELANGER, J.B. (1849). "Notes sur le Cours d'Hydraulique." ('Notes on the Hydraulics Subject.') *Mém. Ecole Nat. Ponts et Chaussées*, Paris, France (in French).
- BELIDOR, B.F. de (1737-1753). "Architecture Hydraulique." ('Hydraulic Architecture.') *Charles-Antoine Jombert*, Paris, France, 4 volumes (in French).
- BELYAKOV, A.A. (1991). "Hydraulic Engineering and the Environment in Antiquity." *Gidrotekhnicheskoe Stroitel'stvo*, No. 8, pp. 46-51 (in Russian). (Translated in *Hydrotechnical Construction*, 1992, Plenum Publ., pp. 516-523).
- BEYER, W.H. (1982). "CRC Standard Mathematical Tables." *CRC Press Inc.*, Boca Raton, Florida, USA.
- BHOWMIK, N.G. (1996). "Impact of the 19993 Floods on the Upper Mississippi and Missouri River Basins in the U.S.A.." *Water International*, Vol. 21, pp. 158-169.
- BOS, M.G. (1976). "Discharge Measurement Structures." *Publication No. 161*, Delft Hydraulic Laboratory, Delft, The Netherlands (also Publication No. 20, ILRI, Wageningen, The Netherlands).
- BOS, M.G., REPLOGLE, J.A., and CLEMMENS, A.J. (1991). "Flow Measuring Flumes for Open Channel Systems." *ASAE Publ.*, St. Joseph MI, USA, 321 pages.
- BOSSUT, Abbé C. (1772). "Traité Elémentaire d'Hydrodynamique." (Elementary Treaty on Hydrodynamics.) Paris, France, 1st ed. (in French). (2nd ed. : 1786, Paris, France; 3rd ed. : 1796, Paris, France)
- BOUSSINESQ, J.V. (1877). "Essai sur la Théorie des Eaux Courantes." ('Essay on the Theory of Water Flow.') *Mémoires présentés par divers savants à l'Académie des Sciences*, Paris, France, Vol. 23, ser. 3, No. 1, supplément 24, pp. 1-680 (in French).
- BOUSSINESQ, J.V. (1896). "Théorie de l'Ecoulement Tourbillonnant et Tumultueux des Liquides dans les Lits Rectilignes à Grande Section (Tuyaux de Conduite et Canaux Découverts) quand cet Ecoulement s'est régularisé en un Régime Uniforme, c'est-à-dire, moyennement pareil à travers toutes les Sections Normales du Lit." ('Theory of Turbulent and Tumultuous Flow of Liquids in prismatic Channels of Large Cross-sections (Pipes and Open Channels) when the Flow is Uniform, i.e., Constant in Average at each Cross-section along the Flow Direction.') *Comptes Rendus des séances de l'Académie des Sciences*, Paris, France, Vol. 122, pp. 1290-1295 (in French).
- BOYS, P.F.D. du (1879). "Etude du Régime et de l'Action exercée par les Eaux sur un Lit à Fond de Gravier indéfiniment affouillable." ('Study of Flow Regime and Force exerted on a Gravel Bed of infinite Depth.') *Ann. Ponts et Chaussées*, Paris, France, série 5, vol. 19, pp. 141-195 (in French).
- BRADLEY, J.N., and PETERKA, A.J. (1957). "The Hydraulic Design of Stilling Basins." *Jl of Hyd. Div.*, ASCE, Vol. 83, No. HY5, papers 1401, 1402 and 1403.

CHANSON, H. (2002) "Hidraulica Del Flujo en Canales Abiertos", McGraw Hill Interamericana, División Universidad, Columbia (ISBN 10: 958-410-256-7) (EAN: 9789584102560).

- BRADLEY, J.N., and PETERKA, A.J. (1957). "The Hydraulic Design of Stilling Basins : Hydraulic Jumps on a Horizontal Apron (Basin I)." *Jl of Hyd. Div.*, ASCE, Vol. 83, No. HY5, paper 1401, pp. 1401-1/1401-22.
- BRADLEY, J.N., and PETERKA, A.J. (1957). "The Hydraulic Design of Stilling Basins : High dams, Earth Dams and Large Canal Structures (Basin II)." *Jl of Hyd. Div.*, ASCE, Vol. 83, No. HY5, paper 1402, pp. 1402-1/1402-14.
- BRADLEY, J.N., and PETERKA, A.J. (1957). "The Hydraulic Design of Stilling Basins : Short Stilling Basin for Canal Structures, Small Outlet Works and Small Spillways (Basin III)." *Jl of Hyd. Div.*, ASCE, Vol. 83, No. HY5, paper 1403, pp. 1403-1/1403-22.
- BRESSE, J.A. (1860). "Cours de Mécanique Appliquée Professé à l'Ecole des Ponts et Chaussées." ('Course in Applied Mechanics lectured at the Pont-et-Chaussées Engineering School.') *Mallet-Bachelier*, Paris, France (in French).
- BUAT, P.L.G. du (1779). "Principes d'Hydraulique." ('Hydraulic Principles.') *Imprimerie de Monsieur*, Paris, France, 1st ed. (in French). (2nd ed. : 1786, Paris, France, 2 volumes; 3rd ed. : 1816, Paris, France, 3 volumes)
- BUCKINGHAM, E. (1915). "Model Experiments and the Form of Empirical Equations." *Transactions*, ASME, Vol. 37, pp. 263-296.
- BUCKLEY, A.B. (1923) "The Influence of Silt on the Velocity of Water Flowing in Open Channels." *Minutes of the Proc. Instn Civ. Engrs.*, 1922-1923, Vol. 216, Part II, pp. 183-211. Discussion, pp. 212-298.
- CAIN, P. (1978). "Measurements within Self-Aerated Flow on a Large Spillway." *Ph.D. Thesis*, Ref. 78-18, Dept. of Civil Engrg., Univ. of Canterbury, Christchurch, New Zealand.
- CAIN, P., and WOOD, I.R. (1981). "Measurements of Self-aerated Flow on a Spillway." *Jl. Hyd. Div.*, ASCE, 107, HY11, pp. 1425-1444.
- CARVILL, J. (1981). "Famous Names in Engineering." *Butterworths*, London, UK, 1981.
- CHANG, C.J. (1996). "A Tale of Two Reservoirs - Greater Taipei's Water Woes." *Sinorama*, Vol. 21, No. 12, pp. 6-19.
- CHANSON, H. (1995a). "Flow Characteristics of Undular Hydraulic Jumps. Comparison with Near-Critical Flows." *Report CH45/95*, Dept. of Civil Engineering, University of Queensland, Australia, June, 202 pages.
- CHANSON, H. (1995b). "Hydraulic Design of Stepped Cascades, Channels, Weirs and Spillways." *Pergamon*, Oxford, UK, Jan., 292 pages.
- CHANSON, H. (1997). "Air Bubble Entrainment in Free-surface Turbulent Shear Flows." *Academic Press*, London, UK, 401 pages.
- CHANSON, H., and JAMES, P. (1998). "Rapid Reservoir Sedimentation of Four Historic Thin Arch Dams in Australia." *Jl of Performance of Constructed Facilities*, ASCE, No. 2, May.
- CHANSON, H., and MONTES, J.S. (1995). "Characteristics of Undular Hydraulic Jumps. Experimental Apparatus and Flow Patterns." *Jl of Hyd. Engrg.*, ASCE, Vol. 121, No. 2, pp. 129-144. Discussion : Vol. 123, No. 2, pp. 161-164.

- CHANSON, H. (2002) "Hidraulica Del Flujo en Canales Abiertos", McGraw Hill Interamericana, División Universidad, Columbia (ISBN 10: 958-410-256-7) (EAN: 9789584102560).
- CHANSON, H., and WHITMORE, R.L. (1996). "The Stepped Spillway of the Gold Creek Dam (built in 1890)." *ANCOLD Bulletin*, No. 104, Dec., pp. 71-80.
- CHEN, C.L. (1990). "Unified Theory on Power Laws for Flow Resistance." *Jl of Hyd. Engrg.*, ASCE, Vol. 117, No. 3, pp. 371-389.
- CHENG, N.S. (1997). "Simplified Settling Velocity Formula for Sediment Particle." *Jl of Hyd. Engrg.*, ASCE, Vol. 123, No. 2, pp. 149-152.
- CHIEN, N. (1954). "Meyer-Peter Formula for Bed-Load Transport and Einstein Bed-Load Function." *Research Report No. 7*, Univ. Calif. Inst. of Engrg., USA.
- CHIEW, Y.M., and PARKER, G. (1994). "Incipient Sediment Motion on Non-Horizontal Slopes." *Jl of Hyd. Res.*, IAHR, Vol. 32, No. 5, pp. 649-660.
- CHOW, V.T. (1973). "Open Channel Hydraulics." *McGraw-Hill International*, New York, USA.
- COLEBROOK, C.F., (1939). "Turbulent Flow in Pipes with particular reference to the Transition Region between the Smooth and Rough Pipe Laws." *Jl Inst. Civ. Engr*, 1938-1939, No. 4, pp. 133-156.
- COLEMAN, N.L. (1970). "Flume Studies of the Sediment Transfer Coefficient." *Water Res. Res.*, Vol. 6, No. 3, pp. 801-809.
- COLES, D. (1956). "The Law of Wake in the Turbulent Boundary Layer." *Jl of Fluid Mech.*, Vol. 1, pp. 191-226.
- COMOLET, R. (1976) "Mécanique Expérimentale des Fluides." ('Experimental Fluid Mechanics') *Masson editor*, Paris, France (in French).
- Concrete Pipe Association of Australasia (1991). "Hydraulics of Precast Concrete Conduits." *Jenkin Buxton Printers*, Australia, 3rd edition, 72 pages.
- COOK, O.F. (1916). "Staircase Falls of the Ancients." *National Geographic Magazine*, Vol. 29, pp. 474-534
- CORIOLIS, G.G. (1836). "Sur l'établissement de la formule qui donne la figure des remous et sur la correction qu'on doit introduire pour tenir compte des différences de vitesses dans les divers points d'une même section d'un courant." ('On the establishment of the formula giving the backwater curves and on the correction to be introduced to take into account the velocity differences at various points in a cross-section of a stream.') *Annales des Ponts et Chaussées*, 1st Semester, Series 1, Vol. 11, pp. 314-335 (in French).
- COUETTE, M. (1890). "Etude sur les Frottements des Liquides." ('Study on the Frictions of Liquids.') *Ann. Chim. Phys.*, Paris, France, Vol 21, pp. 433-510 (in French).
- CREAGER, W.P. (1917). "Engineering of Masonry Dams." *John Wiley & Sons*, New York, USA.
- CREAGER, W.P., JUSTIN, J.D., and HINDS, J. (1945). "Engineering for Dams." *John Wiley & Sons*, New York, USA, 3 Volumes.
- DANILEVSKII, V.V. (1940). "History of Hydroengineering in Russia before the Nineteenth Century." *Gosudarstvennoe Energeticheskoe Izdatel'stvo*, Leningrad, USSR (in Russian) (English translation : *Israel Program for Scientific Translation*, IPST No. 1896, Jerusalem, Israel, 1968, 190 pages).
- DARCY, H.P.G. (1856). "Les Fontaines Publiques de la Ville de Dijon." ('The Public Fountains of the City of Dijon') *Victor Dalmont*, Paris, France, 647 pages (in French).

CHANSON, H. (2002) "Hidraulica Del Flujo en Canales Abiertos", McGraw Hill Interamericana, División Universidad, Columbia (ISBN 10: 958-410-256-7) (EAN: 9789584102560).

DARCY, H.P.G. (1858). "Recherches Expérimentales relatives aux Mouvements de l'Eau dans les Tuyaux." ('Experimental Research on the Motion of Water in Pipes.') *Mémoires Présentés à l'Académie des Sciences de l'Institut de France*, Vol. 14, p. 141 (in French).

DARCY, H.P.G., and BAZIN, H. (1865). "Recherches Hydrauliques." ('Hydraulic Research.') *Imprimerie Impériales*, Paris, France, Parties 1ère et 2ème (in French).¹

DEGREMONT (1979). "Water Treatment Handbook" *Halsted Press Book*, John Wiley & Sons, 5th edition, New York, USA

DOOGE, J.C.I. (1991). "The Manning Formula in Context." in 'Channel Flow Resistance : Centennial of Manning's Formula', *Water Resources Publ.*, Littleton CO, USA, Ed. B.C. YEN, pp. 136-185.

DUPUIT, A.J.E. (1848). "Etudes Théoriques et Pratiques sur le Mouvement des Eaux Courantes." ('Theoretical and Practical Studies on Flow of Water.') *Dunod*, Paris, France (in French).

EINSTEIN, A. (1906). "Eine Neue Bestimmung der Moleküldimensionen." *Ann. Phys.*, 19, p. 289 (in German).

EINSTEIN, A. (1911). "Eine Neue Bestimmung der Moleküldimensionen." *Ann. Phys.*, 34, p. 591 (in German).

EINSTEIN, H.A. (1942). "Formulas for the Transportation of Bed-Load." *Transactions, ASCE*, Vol. 107, pp. 561-573.

EINSTEIN, H.A. (1950). "The Bed-Load Function for Sediment Transportation in Open Channel Flows." *US Dept. of Agriculture Techn. Bulletin No. 1026*, Soil Conservation Service, Washington DC, USA.

ELDER, J.W. (1959). "The Dispersion of Marked Fluid in Turbulent Shear Flow." *Jl of Fluid Mech.*, Vol. 5, No. 4, pp. 544-560.

ENGELUND, F. (1966). "Hydraulic Resistance of Alluvial Streams." *Jl of Hyd. Div.*, ASCE, Vol. 92, No. HY2, pp. 315-326.

ENGELUND, F., and HANSEN, E. (1967). "A Monograph on Sediment Transport in Alluvial Streams." *Teknisk Forlag*, Copenhagen, Denmark.

ENGELUND, F., and HANSEN, E. (1972). "A Monograph on Sediment Transport in Alluvial Streams." *Teknisk Forlag*, Copenhagen, Denmark, 3rd edition, 62 pages.

EURENIUS, J. (1980). "Ancient Dams of Saudi Arabia." *Intl Water Power and Dam Construction*, Vol. 32, No. 3, March, pp. 21-22.

FALVEY, H.T. (1980). "Air-Water Flow in Hydraulic Structures." *USBR Engrg. Monograph*, No. 41, Denver, Colorado, USA.

FARRINGTON, I.S. (1980). "The Archaeology of Irrigation Canals with Special Reference to Peru." *World Archaeology*, Vol. 11, No. 3, pp. 287-305.

FARRINGTON, I.S., and PARK, C.C. (1978). "Hydraulic Engineering and Irrigation Agriculture in the Moche Valley, Peru : c. A.D. 1250-1532." *Jl of Archaeological Science*, Vol. 5, pp. 255-268.

FAWER, C. (1937). "Etude de Quelques Ecoulements Permanents à Filets Courbes." ('Study of some Steady Flows with Curved Streamlines.') *Thesis*, Lausanne, Switzerland, Imprimerie La Concorde, 127 pages (in French).

¹Work prepared and published posthumously by BAZIN (1865a,b).

- CHANSON, H. (2002) "Hidraulica Del Flujo en Canales Abiertos", McGraw Hill Interamericana, División Universidad, Columbia (ISBN 10: 958-410-256-7) (EAN: 9789584102560).
- FERNANDEZ LUQUE, R., and van BEEK, R. (1976). "Erosion and Transport of Bed-Load Sediment." *Jl of Hyd. Res.*, IAHR, Vol. 14, No. 2, pp. 127-144.
- FICK, A.E. (1855). "On Liquid Diffusion." *Philos. Mag.*, Vol. 4, No. 10, pp. 30-39.
- FISCHER, H.B., LIST, E.J., KOH, R.C.Y., IMBERGER, J., and BROOKS, N.H. (1979). "Mixing in Inland and Coastal Waters." *Academic Press*, New York, USA.
- FOURIER, J.B.J. (1822). "Théorie Analytique de la Chaleur." ('Analytical Theory of Heat.') *Didot*, Paris, France (in French).
- FRANC, J.P., AVELLAN, F., BELAHADJI, B., BILLARD, J.Y., BRIANCON-MARJOLLET, L., FRECHOU, D., FRUMAN, D.H., KARIMI, A., KUENY, J.L., and MICHEL, J.M. (1995). "La Cavitation. Mécanismes Physiques et Aspects Industriels." ('The Cavitation. Physical Mechanisms and Industrial Aspects.') *Presses Universitaires de Grenoble*, Collection Grenoble Sciences, France, 581 pages (in French).
- GARBRECHT, G. (1987a). "Hydraulics and Hydraulic Research : a Historical Review." *Balkema Publ.*, Rotterdam, The Netherlands.
- GARBRECHT, G. (1987b). "Hydrologic and Hydraulic Concepts in Antiquity." in "Hydraulics and Hydraulic Research : a Historical Review", *Balkema Publ.*, Rotterdam, Netherlands, pp. 1-22.
- GARBRECHT, G. (1996). "Historical Water Storage for Irrigation in the Fayum Depression (Egypt)." *Irrigation and Drainage Systems*, Vol. 10, No. 1, pp. 47-76.
- GANCHIKOV, V.G. and MUNAVVAROV, Z.I. (1991). "The Marib Dam (History and the present Time)." *Gidrotekhnicheskoe Stroitel'stvo*, No. 4, pp. 50-55 (in Russian). (Translated in *Hydrotechnical Construction*, 1991, Plenum Publ., pp. 242-248).
- GAUCKLER, P.G. (1867). "Etudes Théoriques et Pratiques sur l'Ecoulement et le Mouvement des Eaux." ('Theoretical and Practical Studies of the Flow and Motion of Waters.') *Comptes Rendues de l'Académie des Sciences*, Paris, France, Tome 64, pp. 818-822 (in French).
- GIBBS, R.J., MATTHEWS, M.D., and LINK, D.A. (1971). "The Relationship between Sphere Size and Settling Velocity." *Jl of Sedimentary Petrology*, Vol. 41, No. 1, pp. 7-18.
- GILBERT, G.K. (1914). "The Transport of Debris by Running Water." *Professional Paper No. 86*, US Geological Survey, Washington DC, USA.
- GRAF, W.H. (1971). "Hydraulics of Sediment Transport". *McGraw-Hill*, New York, USA.
- GUY, H.P., SIMONS, D.B., and RICHARDSON, E.V. (1966). "Summary of Alluvial Channel Data from Flume Experiments." *Professional Paper No. 462-I*, US Geological Survey, Washington DC, USA.
- HAGER, W.H. (1983). "Hydraulics of Plane Free Overfall." *Jl of Hyd. Engrg.*, ASCE, VI. 109, No. 12, pp. 1683-1697.
- HAGER, W. (1991). "Experiments on Standard Spillway Flow." *Proc. Instn. Civ. Engrs., London*, Part 2, Vol. 91, pp. 399-416.
- HAGER, W.H. (1992a). "Spillways, Shockwaves and Air Entrainment - Review and Recommendations." *ICOLD Bulletin*, No. 81, Jan., 117 pages.

- CHANSON, H. (2002) "Hidraulica Del Flujo en Canales Abiertos", McGraw Hill Interamericana, División Universidad, Columbia (ISBN 10: 958-410-256-7) (EAN: 9789584102560).
- HAGER, W.H. (1992b). "Energy Dissipators and Hydraulic Jump. " *Kluwer Academic Publ.*, Water Science and Technology Library, Vol. 8, Dordrecht, Netherlands, 288 pages.
- HAGER, W.H., BREMEN, R., and N. KAWAGOSHI N. (1990). "Classical Hydraulic Jump : Length of Roller." *Jl of Hyd. Res.*, IAHR, Vol. 28, No. 5, pp. 591-608.
- HAGER, W.H., and SCHWALT, M. (1994). "Broad-Crested Weir." *Jl of Irrigation and Drainage Engrg.*, ASCE, Vol. 120, No. 1, pp. 13-26. Discussion : Vol. 12, No. 2, pp. 222-226.
- HATHAWAY, G.A. (1958). "Dams - Their Effect on some Ancient Civilizations." *Civil Engineering*, ASCE, Vol. 28, No. 1, Jan., pp. 58-63.
- HEE, M. (1969). "Hydraulics of Culvert Design Including Constant Energy Concept." *Proc. 20th Conf. of Local Authority Engineers*, Dept. of Local Govt, Queensland, Australia, paper 9, pp. 1-27.
- HEE, M. (1978). "Selected Case Histories." *Proc. Workshop on Minimum Energy Design of Culvert and Bridge Waterways*, Australian Road Research Board, Melbourne, Australia, Session 4, Paper 1, pp. 1-11.
- HELLSTRÖM, B. (1941). "Några Iakttagelser Över Vittring Erosion Och Slambildning i Malaya Och Australien." *Geografiska Annaler*, Stockholm, Sweden, No. 1-2, pp. 102-124 (in Swedish).
- HELMHOLTZ, H.L.F. (1868). "Über discontinuirliche Flüssigkeits-Bewegungen." *Monatsberichte der königlich preussischen Akademie der Wissenschaft zu Berlin*, pp. 215-228 (in German).
- HENDERSON, F.M. (1966). "Open Channel Flow." *MacMillan Company*, New York, USA.
- HERR, L. A., and BOSSY, H.G. (1965). "Hydraulic Charts for the Selection of Highway Culverts." *Hydraulic Eng. Circular*, US Dept. of Transportation, Federal Highway Admin., HEC No. 5, December.
- HERSCHY, R. (1995). "General Purpose Flow Measurement Equations for Flumes and Thin Plate Weirs." *Flow Meas. Instrum.*, Vol. 6, No. 4, pp. 283-293.
- HINZE, J.O. (1975). "Turbulence." *McGraw-Hill Publ.*, 2nd Edition, New York, USA.
- HOWE, J.W. (1949). "Flow Measurement." *Proc 4th Hydraulic Conf.*, Iowa Institute of Hydraulic Research, H. ROUSE Ed., John Wiley & Sons Publ., June, pp. 177-229.
- HUMBER, W. (1876). "Comprehensive Treatise on the Water Supply of Cities and Towns with Numerous Specifications of Existing Waterworks." *Crosby Lockwood*, London, UK.
- Hydropower & Dams (1997). "Mini Hydro Scheme for Egyptian Oasis." *Intl Jl of Hydropower and Dams*, Vol. 4, No. 4, p. 12.
- IDEL'CIK, I.E. (1969). "Mémento des Pertes de Charge." ('Handbook of Hydraulic Resistance.') *Eyrolles Editor*, Collection de la direction des études et recherches d'Electricité de France, Paris, France.
- IDELCHIK, I.E. (1986). "Handbook of Hydraulic resistance." *Hemisphere Publ.*, 2nd rev. and augm. ed., New York, USA.
- International Commission on Large Dams (1984). "World Register of Dams - Registre Mondial des barrages - ICOLD." *ICOLD*, Paris, France, 753 pages.
- IPPEN, A.T., and HARLEMAN, R.F. (1956). "Verification of Theory for Oblique Standing Waves." *Transactions*, ASCE, Vol. 121, pp. 678-694.
- ISO (1979). "Units of Measurements - ISO Standards Handbook 2." *International Organization for Standardization ISO*, Switzerland

- CHANSON, H. (2002) "Hidraulica Del Flujo en Canales Abiertos", McGraw Hill Interamericana, División Universidad, Columbia (ISBN 10: 958-410-256-7) (EAN: 9789584102560).
- JEVONS, W.S. (1858). "On Clouds; their Various Forms, and Producing Causes." *Sydney Magazine of Science and Art*, Vol. 1, No. 8, pp. 163-176.
- JULIEN, P.Y. (1995). "Erosion and Sedimentation." *Cambridge University Press*, Cambridge, UK, 280 pages.
- JULIEN, P.Y., and RASLAN, Y. (1998). "Upper-Regime Plane Bed." *Jl of Hyd. Engrg.*, ASCE, Vol. 124, No. 11, pp. 1986-1096.
- KAMPHUIS, J.W. (1974). "Determination of Sand Roughness for Fixed Beds." *Jl of Hyd. Res.*, IAHR, Vol. 12, No. 2, pp. 193-203.
- KAZEMIPOUR, A.K., and APELT, C.J. (1983). "Effects of Irregularity of Form on Energy Losses in Open Channel Flow." *Aust. Civil Engrg Trans.*, I.E.Aust., Vol. CE25, pp. 294-299.
- KELLER, R.J., and RASTOGI, A.K. (1977). "Design Chart for Predicting Critical Point on Spillways." *Jl of Hyd. Div.*, ASCE, Vol. 103, No. HY12, pp. 1417-1429.
- KELVIN, Lord (1871). "The influence of Wind and Waves in Water Supposed Frictionless." *London, Edinburgh and Dublin Philosophical Magazine and Journal of Science*, Series 4, Vol. 42, pp. 368-374.
- KENNEDY, J.F. (1963). "The Mechanics of Dunes and Antidunes in Erodible-Bed Channels." *Jl of Fluid Mech.*, Vol. 16, No. 4, pp. 521-544 (& 2 plates).
- KEULEGAN, G.H. (1938). "Laws of Turbulent Flow in Open Channels." *Jl of Research, National Bureau of Standards*, Vol. 21, Dec., Paper RP1151, pp. 707-741.
- KNAPP, F.H. (1960). "Ausfluss, Überfall and Durchfluss im Wasserbau." *Verlag G. Braun*, Karlsruhe, Germany (in German).
- KORN, G.A., and KORN, T.M. (1961). "Mathematical Handbook for Scientist and Engineers." McGraw-Hill Book Comp., New York, USA.
- KOSOK, P. (1940). "The Role of Irrigation in Ancient Peru." *Proc. 8th American Scientific Congress*, Waishington DC, USA, Vol. 2, pp. 168-178.
- LAGRANGE, J.L. (1781). "Mémoire sur la Théorie du Mouvement des Fluides." ('Memoir on the Theory of Fluid Motion.') in *Oeuvres de Lagrange*, Gauthier-Villars, Paris, France (printed in 1882) (in French).
- LANE, E.W., and KALINSKE, A.A. (1941). "Engineering Calculations of Suspended Sediment." *Trans. Amer. Geophys. Union*, Vol. 20.
- LANNING, E.P. (1967). "Peru before the Incas." *Prentice-Hall*, Englewood Cliffs NJ, USA.
- LAURSEN, E.M. (1958). "The Total Sediment Load of Streams." *Jl of Hyd. Div.*, ASCE, Vol. 84, No. HY1, Paper 1530, pp. 1-36.
- LESIEUR, M. (1994). "La Turbulence." ('The Turbulence.') *Presses Universitaires de Grenoble*, Collection Grenoble Sciences, France, 262 pages (in French).
- LEVIN, L. (1968). "Formulaire des Conduites Forcées, Oléoducs et Conduits d'Aération." ('Handbook of Pipes, Pipelines and Ventilation Shafts.') *Dunod*, Paris, France (in French).
- LI, Damei, and HAGER, W.H. (1991). "Correction Coefficients for Uniform Channel Flow." *Can. Jl. of Civ. Engrg.*, No. 18, pp. 156-158.
- LIGGETT, J.A. (1993). "Critical Depth, Velocity Profiles and Averaging." *Jl of Irrig. and Drain. Engrg.*, ASCE, Vol. 119, No. 2, pp. 416-422.

- CHANSON, H. (2002) "Hidraulica Del Flujo en Canales Abiertos", McGraw Hill Interamericana, División Universidad, Columbia (ISBN 10: 958-410-256-7) (EAN: 9789584102560).
- LIGGETT, J.A. (1994). "Fluid Mechanics." *McGraw-Hill*, New York, USA.
- McKAY, G.R. (1978). "Design principles of Minimum Energy Waterways." *Proc. Workshop on Minimum Energy Design of Culvert and Bridge Waterways*, Australian Road Research Board, Melbourne, Australia, Session 1, pp. 1-39.
- McMATH, R.E. (1883). "Silt Movement by the Mississippi." *Van Nostrand's Engineering Magazine*, pp. 32-39.
- MANNING, R. (1890). "On the Flow of Water in Open Channels and Pipes." *Instn of Civil Engineers of Ireland*.
- MARCHI, E. (1993). "On the Free-Overfall." *Jl of Hyd. Res.*, IAHR, Vol. 31, No. 6, pp. 777-790.
- MARIOTTE, E. (1686). "Traité du Mouvement des Eaux et des Autres Corps Fluides." ('Treaty on the Motion of Waters and other Fluids.') Paris, France (in French) (Translated by J.T. DESAGULIERS, *Senex and Taylor*, London, UK, 1718).
- MASON, J.A. (1957). "The Ancient Civilizations of Peru." *Penguin books*, Harmondsworth, UK.
- MAYNORD, S.T. (1991). "Flow Resistance of Riprap." *Jl of Hyd. Engrg.*, ASCE, Vol. 117, No. 6, pp. 687-696.
- MEUNIER, M. (1995). "Compte-Rendu de Recherches No. 3 BVRE de DRAIX." ('Research report No. 3 Experimental Catchment of Draix') *Etudes CEMAGREF, Equipements pour l'Eau et l'Environnement*, No. 21, 248 pages (in French).
- MEYER-PETER, E. (1949). "Quelques Problèmes concernant le Charriage des Matières Solides." (Some Problems related to Bed Load Transport.) *Soc. Hydrotechnique de France*, No. 2 (in French).
- MEYER-PETER, E. (1951). "Transport des matières Solides en Général et problème Spéciaux." *Bull. Génie Civil d'Hydraulique Fluviale*, Tome 5 (in French).
- MEYER-PETER, E., FAVRE, H., and EINSTEIN, A. (1934). "Neuere Versuchsergebnisse über den Geschiebetrieb." *Schweiz. Bauzeitung*, Vol. 103, No. 13 (in German).
- MILLER, A. (1971). "Meteorology." *Charles Merrill Publ.*, Columbus Oh, USA, 2nd ed., 154 pages.
- MILLER, D.S. (1994). "Discharge Characteristics." *IAHR Hydraulic Structures Design Manual No. 8*, Hydraulic Design Considerations, Balkema Publ., Rotterdam, The Netherlands, 249 pages.
- MISES, R. von (1917). "Berechnung von Ausfluss und Überfallzahlen." *Z. ver. Deuts. Ing.*, Vol. 61, p. 447 (in German).
- MONTES, J.S. (1992a). "Curvature Analysis of Spillway Profiles." *Proc. 11th Australasian Fluid Mechanics Conference AFMC*, Vol. 2, Paper 7E-7, Hobart, Australia, pp. 941-944.
- MONTES, J.S. (1992b). "A Potential Flow Solution for the Free Overfall." *Proc. Intn. Civ. Engrs Wat. Marit. & Energy*, Vol. 96, Dec., pp. 259-266. Discussion : 1995, Vol. 112, Mar., pp. 81-87.
- MONTES, J.S., and CHANSON, H. (1998). "Characteristics of Undular Hydraulic Jumps. Results and Calculations." *Jl of Hyd. Engrg.*, ASCE, Vol. 124, No. 2, pp. 192-205.
- MOODY, L.F. (1944). "Friction Factors for Pipe Flow." *Transactions*, ASME, Vol. 66, pp. 671-684.
- MORELLI, C. (1971). "The International Gravity Standardization Net 1971 (I.G.S.N.71)." *Bureau Central de l'Association Internationale de Géodésie*, Paris, France.

- CHANSON, H. (2002) "Hidraulica Del Flujo en Canales Abiertos", McGraw Hill Interamericana, División Universidad, Columbia (ISBN 10: 958-410-256-7) (EAN: 9789584102560).
- NAVIER, M. (1823). "Mémoire sur les Lois du Mouvement des Fluides." ('Memoirs on the Laws of Fluid Motion.') *Mém. Acad. des Sciences*, Paris, France, Vol. 6, pp. 389-416.
- NIALS, F.L., DEEDS, E.E., MOSELEY, M.E., POZORSKI, S.G., POZORSKI, S.G., and FELDMAN, R. (1979a). "El Niño : the Catastrophic Flooding of Coastal Peru. Part I." *Field Museum of Natural History Bulletin*, Vol. 50, No. 7, pp. 4-14.
- NIALS, F.L., DEEDS, E.E., MOSELEY, M.E., POZORSKI, S.G., POZORSKI, S.G., and FELDMAN, R. (1979b). "El Niño : the Catastrophic Flooding of Coastal Peru. Part II." *Field Museum of Natural History Bulletin*, Vol. 50, No. 8, pp. 4-10.
- NIELSEN, P. (1992). "Coastal Bottom Boundary Layers and Sediment Transport." *Advanced Series on Ocean Eng.*, Vol. 4, World Scientific Publ., Singapore.
- NIELSEN, P. (1993). "Turbulence Effects on the Settling of Suspended Particles." *Jl of Sedimentary Petrology*, Vol. 63, No. 5, pp. 835-838.
- NIKURADSE, J. (1932). "Gesetzmässigkeit der turbulenten Strömung in glatten Rohren." ('Laws of Turbulent Pipe Flow in Smooth Pipes.') *VDI-Forschungsheft*, No. 356 (in German) (Translated in NACA TT F-10, 359).
- NIKURADSE, J. (1933). "Strömungsgesetze in rauhen Rohren." ('Laws of Turbulent Pipe Flow in Rough Pipes.') *VDI-Forschungsheft*, No. 361 (in German) (Translated in NACA Tech. Memo. No. 1292, 1950).
- PHILLIPS, W. (1955). "Qataban and Sheba - Exploring Ancient Kingdoms on the Biblical Spice Routes of Arabia." *Victor Gollancz*, London, UK.
- PITLICK, J. (1992). "Flow Resistance under Conditions of Intense Gravel Transport." *Water Res. Res.*, Vol. 28, No. 3, pp. 891-903.
- POISEUILLE, J.L.M. (1839). "Sur le Mouvement des Liquides dans le Tube de Très Petit Diamètre." ('On the Movement of Liquids in the Pipe of Very Small Diameter.') *Comptes Rendues de l'Académie des Sciences de Paris*, Vol. 9, p. 487 (in French).
- PRANDTL, L. (1904). "Über Flüssigkeitsbewegung bei sehr kleiner Reibung." ('On Fluid Motion with Very Small Friction.') *Verh. III Intl. Math. Kongr.*, Heidelberg, Germany (in German) (also NACA Tech. Memo. No. 452, 1928).
- PRANDTL, L. (1925). "Über die ausgebildete Turbulenz." ('On Fully Developed Turbulence.') *Z.A.M.M.*, Vol. 5, pp. 136-139 (in German).
- RAJARATNAM, N. (1967). "Hydraulic Jumps." *Advances in Hydrosience*, Ed. V.T. CHOW, Academic Press, New York, USA, Vol. 4, pp. 197-280.
- RAJARATNAM, N., and MURALIDHAR, D. (1968). "Characteristics of the Rectangular Free Overfall." *Jl of Hyd. Res.*, IAHR, Vol. 6, No. 3, pp. 233-258.
- RAND, W. (1955). "Flow Geometry at Straight Drop Spillways." *Proceedings*, ASCE, Vol. 81, No. 791, Sept., pp. 1-13.
- RAUDKIVI, A.J. (1990). "Loose Boundary Hydraulics." *Pergamon Press*, Oxford, UK, 3rd edition.
- RAUDKIVI, A.J., and CALLANDER, R.A. (1976). "Analysis of Groundwater Flow." *Edward Arnold Publisher*, London, UK.

CHANSON, H. (2002) "Hidraulica Del Flujo en Canales Abiertos", McGraw Hill Interamericana, División Universidad, Columbia (ISBN 10: 958-410-256-7) (EAN: 9789584102560).

RAYLEIGH, Lord (1883). "Investigation on the Character of the Equilibrium of an Incompressible Heavy Fluid of Variable Density." *Proc. London Mathematical Society*, Vol. 14, pp. 170-177.

REHBOCK, T. (1929). "The River Hydraulic Laboratory of the Technical University of Karlsruhe." in *Hydraulic Laboratory Practice*, ASME, New York, USA, pp. 111-242.

REYNOLDS, O. (1883). "An Experimental Investigation of the Circumstances which Determine whether the Motion of Water shall be Direct or Sinuous, and the Laws of Resistance in Parallel Channels." *Phil. Trans. Roy. Soc. Lond.*, Vol. 174, pp. 935-982.

RICHTER, J.P. (1939). "The Literary Works of LEONARDO DA VINCI." *Oxford University Press*, London, UK, 2nd edition, 2 volumes.

RIJN, L.C. van (1984a). "Sediment Transport, Part I : Bed Load Transport." *Jl of Hyd. Engrg.*, ASCE. Vol. 110, No. 10, pp. 1431-1456.

RIJN, L.C. van (1984b). "Sediment Transport, Part II : Suspended Load Transport." *Jl of Hyd. Engrg.*, ASCE. Vol. 110, No. 11, pp. 1613-1641.

RIJN, L.C. van (1984c). "Sediment Transport, Part III : Bed Forms and Alluvial Roughness." *Jl of Hyd. Engrg.*, ASCE. Vol. 110, No. 12, pp. 1733-1754.

RIJN, L.C. van (1993). "Principles of Sediment Transport in Rivers, Estuaries and Coastal Seas." *Aqua Publ.*, Amsterdam, The Netherlands.

ROUSE, H. (1936). "Discharge Characteristics of the Free Overfall." *Civil Engineering*, Vol. 6, April, p. 257.

ROUSE, H. (1937). "Modern Conceptions of the Mechanics of Turbulence." *Transactions*, ASCE, Vol. 102, pp. 463-543.

ROUSE, H. (1938). "Fluid Mechanics for Hydraulic Engineers." *McGraw-Hill Publ.*, New York, USA (also Dover Publ., New York, USA, 1961, 422 pages)

ROUSE, H. (1943). "Energy Loss at the Base of a Free Overfall - Discussion." *Transactions*, ASCE, Vol. 108, pp. 1383-1387.

ROUSE, H. (1946). "Elementary Mechanics of Fluids." *John Wiley & Sons*, New York, USA, 376 pages.

SARRAU (1884). "Cours de Mécanique." ('Lecture Notes in Mechanics.') *Ecole Polytechnique*, Paris, France (in French).

SCHETZ, J.A. (1993). "Boundary Layer Analysis." *Prentice Hall*, Englewood Cliffs, USA.

SCHLICHTING, H. (1979). "Boundary Layer Theory." *McGraw-Hill*, New York, USA, 7th edition.

SCHNITTER, N.J. (1967). "A Short History of Dam Engineering." *Water Power*, Vol. 19, Apr., pp. 142-148.

SCHNITTER, N.J. (1994). "A History of Dams : the Useful Pyramids." *Balkema Publ.*, Rotterdam, The Netherlands.

SCHOKLITSCH, A. (1914). "Über Schleppkraft un Geschiebebewegung." *Engelmann*, Leipzige, Germany (in German).

SCHOKLITSCH, A. (1930). "Handbuch des Wasserbaues." ('Handbook of Hydraulic Structures.') *Springer*, Vienna, Austria.

SCHOKLITSCH, A. (1950). "Handbuch des Wasserbaues." ('Handbook of Hydraulic Structures.') *Springer*, Vienna, Austria, 2nd edition.

- CHANSON, H. (2002) "Hidraulica Del Flujo en Canales Abiertos", McGraw Hill Interamericana, División Universidad, Columbia (ISBN 10: 958-410-256-7) (EAN: 9789584102560).
- SCIMEMI, E. (1930). "Sulla Forma delle Vene Tracimanti." ('The Form of Flow over Weirs.') *L'Energia Elettrica*, Milano, Vol. 7, No. 4, p. 293-305 (in Italian).
- SHIELDS, A. (1936). "Anwendung der Aehnlichkeitsmechanik und der Turbulenz Forschung auf die Geschiebebewegung." *Mitt. der Preussische Versuchanstalt für Wasserbau und Schiffbau*, Berlin, Germany, No. 26.
- SMITH, N. (1971). "A History of Dams." *The Chaucer Press*, Peter Davies, London, UK.
- SPIEGEL, M.R. (1968). "Mathematical Handbook of Formulas and Tables." *McGraw-Hill Inc.*, New York, USA.
- STOKES, G. (1845). *Trans. Camb. Phil. Soc.*, Vol. 8.
- STOKES, G. (1851). "On the effect of Internal Friction of Fluids on the Motion of Pendulums.: *Trans. Camb. Phil. Soc.*, Vol. 9, Part II, pp. 8-106.
- STRAUB, L.G. (1935). "Missouri River Report." *House Document 238*, US Government Printing Office, Washington DC, USA.
- STREETER, V.L., and WYLIE, E.B. (1981). "Fluid Mechanics." *McGraw-Hill*, 1st SI Metric edition, Singapore.
- STRICKLER, A. (1923). "Beiträge zur Frage der Geschwindigkeitsformel und der Rauhligeitszahlen für Ströme, Kanäle und geschlossene Leitungen." ('Contributions to the Question of a velocity Formula and Roughness data for Streams, Channels and Closed Pipelines.') *Mitt. des Eidgenössischen Amtes für Wasserwirtschaft*, Vol. 16, Bern, Switzerland (in German). (Tranlation T-10, W.M. Keck lab. of Hyd. and Water Resources, Calif. Inst. Tech., USA, 1981)
- SUMER, B.M., KOZAKIEWICZ, A., FREDSE, J., and DEIGAARD, R. (1996). "Velocity and Concentration Profiles in Sheet-Flow Layer on Movable Bed." *Jl of Hyd. Engrg.*, ASCE, Col. 122, No. 10, pp. 549-558.
- SUTHERLAND, W. (1893). "The Viscosity of Gases and Molecular Forces." *Phil. Mag.*, Ser. 5, pp. 507-531.
- SWANSON, W.M. (1961). "The Magnus Effect : a Summary of Investigations to Date." *Jl. Basic Engrg.*, Trans. ASME, Series D, Vol. 83, pp. 461-470.
- TAKAHASHI, T. (1991). "Debris Flow." *IAHR Monograph*, Balkema Publ., Rotterdam, The Netherlands.
- THOMPSON, P.A. (1972). "Compressible Fluid Dynamics." *McGraw-Hill*, New York, USA, 665 pages.
- TISON, L.J. (1949). "Origine des Ondes de Sable (Ripple-Marks) et des Bancs de Sable sous l'Action des Courants." ('Origin of Sand Waves (Ripple Marks) and Dunes under the Action of the Flow') *Proc. 3rd Meeting International Association for Hydraulic Structures Research*, Grenoble, France, 5-7 Sept., Paper II-13, pp. 1-15 (in French).
- TRICKER, R.A.R. (1965). "Bores, Breakers, Waves and Wakes." *American Elsevier Publ. Co.*, New York, USA.
- UBBELOHDE-DOERING, H. (1967). "On the Royal Highways of the Inca Civilizations of Ancient Peru." *Thames and Hudson*, London, UK.
- US Department of the Interior (1987). "Design of Small Dams." *Bureau of Reclamation*, Denver CO, USA, 3rd edition.
- VALLENTINE, H.R. (1969). "Applied Hydrodynamics." *Butterworths*, London, UK, SI edition.

- CHANSON, H. (2002) "Hidraulica Del Flujo en Canales Abiertos", McGraw Hill Interamericana, División Universidad, Columbia (ISBN 10: 958-410-256-7) (EAN: 9789584102560).
- VANONI, V.A. (1946). "Transportation of suspended sediment in water." *Transactions*, ASCE, Vol. 111, pp. 67-133.
- WAN, Zhaohui, and WANG, Zhaoyin (1994). "Hyperconcentrated Flow." *Balkema*, IAHR Monograph, Rotterdam, The Netherlands, 290 pages.
- WASSON, R.J., and GALLOWAY, R.W. (1986). "Sediment Yield in the Barrier Range before and after European Settlement." *Australian Rangeland JI*, Vol. 2, No. 2, pp. 79-90.
- WHITE, M.P. (1943). "Energy Loss at the Base of a Free Overfall - Discussion." *Transactions*, ASCE, Vol. 108, pp. 1361-1364.
- WILLCOCKS, W. (1919). "From the Garden of Eden to the Crossing of the Jordan." *E.&F.N. SPON Ltd.*, New York, USA.
- WISNER, P. (1965). "Sur le Rôle du Critère de Froude dans l'Etude de l'Entraînement de l'Air par les Courants à Grande Vitesse." ('On the Role of the Froude Criterion for the Study of Air Entrainment in High Velocity Flows.') *Proc. 11th IAHR Congress*, Leningrad, USSR, paper 1.15 (in French).
- WOOD, I.R. (1991). "Air Entrainment in Free-Surface Flows." *IAHR Hydraulic Structures Design Manual No. 4*, Hydraulic Design Considerations, Balkema Publ., Rotterdam, The Netherlands, 149 pages.
- WOOD, I.R., ACKERS, P., and LOVELESS, J. (1983). "General Method for Critical Point on Spillways." *Jl. of Hyd. Eng.*, ASCE, Vol. 109, No. 2, pp. 308-312.
- YALIN, M.S. (1964). "Geometrical Properties of Sand Waves." *Jl of Hyd. Div.*, ASCE, Vol. 90, No. HY5, pp. 105-119.
- YALIN, M.S., and KARAHAN, E. (1979). "Inception of Sediment Transport." *Jl of Hyd. Div.*, ASCE, Vol. 105, No. HY11, pp. 1433-1443.
- YEN, B.C. (1991a). "Hydraulic Resistance in Open Channels." in 'Channel Flow Resistance : Centennial of Manning's Formula', *Water Resources Publ.*, Littleton CO, USA, Ed. B.C. YEN, pp. 1-135.
- YEN, B.C. (1991b). "Channel Flow Resistance : Centennial of Manning's Formula." *Water Resources Publ.*, Littleton CO, USA, 453 pages.

Notes

IDEL'CIK or IDELCHIK refer to the same Russian author.

DARCY and BAZIN (1865) was published posthumously by BAZIN (1865a,b).

ADDITIONAL BIBLIOGRAPHY

The following paragraphs include several materials of pedagogical value. They may assist the reader (student and lecturer) in gaining a good feel for open channel hydraulics and to visualise practical applications of the lecture material.

Bibliography : History of hydraulics

CARVILL, J. (1981). "Famous Names in Engineering." *Butterworths*, London, UK, 1981.

GALBRECHT, G. (1987). "Hydraulics and Hydraulic Research : a Historical Review." *Balkema Publ.*, Rotterdam, The Netherlands.

ROUSE, H., and INCE, S. (1957). "History of Hydraulics." *Iowa Institute of Hydraulic Research Publ.*, Iowa City, USA, 269 pages.

SCHNITTER, N.J. (1994). "A History of Dams : the Useful Pyramids." *Balkema Publ.*, Rotterdam, The Netherlands.

SMITH, N. (1971). "A History of Dams." *The Chaucer Press*, Peter Davies, London, UK.

Bibliography : Audio-visual material

APELT, C.J. (1994). "The Minimum Energy Loss Culvert." *Videocassette VHS colour*, Dept. of Civil Engineering, University of Queensland, Australia, 18 Minutes.

Comments : Utilised to reduce flooding of stormwater plains drains, the benefits of minimum energy loss culverts, designed by Gordon MACKAY and Colin APELT, are illustrated by comparison with the flow capacity of the standard culvert. It is a very good teaching tool to introduce the concept of specific energy and the application to culvert design.

LERNER, B. (1994). "After the Flood." Videocassette VHS colour, SBS-The Cutting Edge, 48 Minutes.

Comments : In order to control flooding of the river Brahmaputra, Bangladesh, water engineers propose to change the width and course of the river. Along the Mississippi, USA, similar water engineering is the alleged cause of the Mississippi's flooding in 1993. Archival film helps to illustrate some of the problems to be overcome. Produced by Bettina LERNER. Very good documentary dealing with practical applications of open channel hydraulics, sediment transport, catchment hydrology and environmental impact of hydraulic structures.

"Mississippi Floods 1993." Videocassette VHS colour, Australian Channel News, 4 Minutes.

Comments : News footage of the Mississippi flood in 1993. Footage from Australian News Channels 7, 9, 10, SBS.

St Anthony's Falls Hydraulic Laboratory (1947). "Some Phenomena of Open Channel Flow." *Videocassette NTSC B&W*, SAF Hyd. Lab., Minneapolis MN, USA, 33 Minutes.

CHANSON, H. (2002) "Hidraulica Del Flujo en Canales Abiertos", McGraw Hill Interamericana, División Universidad, Columbia (ISBN 10: 958-410-256-7) (EAN: 9789584102560).

Comments : In this program, open channel flow lecture material is demonstrated. It looks at : supercritical and subcritical flow, hydraulic jumps, hydraulic drops, specific energy curve, pressure momentum curve, critical depth, travel of surface waves in channels flowing at critical, subcritical and supercritical velocities, uphill flow, abrupt gate closure, movable bed channels, and more.

US Bureau of Reclamation (1988?). "Challenge at Glen Canyon Dam." *Videocassette VHS colour*, US Dept. of Interior, Denver, Colorado, USA, 27 Minutes.

Comments : This program is divided into two parts. The first part examines flood waters of the Colorado River system. The second part describes the damage caused to the Glen Canyon dam spillways following the excessive amount of water which flowed into Lake Powell due to heavy snow falls late in the season. The program then goes on to examine the method used to repair the damage after the flood has passed. It is a superb educational movie for both civil, environmental and hydraulic engineering students. It is quite entertaining.

US National Committee for Fluid Mechanics (1967). "The Hydraulic Surge Wave." *Videocassette VHS B&W*, Education Development Center, USA, 4 Minutes.

Comments : Film of experiments illustrating the hydraulic surge wave, the hydraulic jump and the analogy between hydraulic jump and surge.